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# SAFETY DATA SHEET

Revision Date 03-Aug-2015

Version 1

## 1. IDENTIFICATION

**Product Name** Trichloroacetic Acid Solution, 100% w/v  
**Product Code** 14955  
**Recommended Use** For laboratory, scientific, R&D or manufacturing use.  
**Company** E K Industries, Inc.  
1403 Herkimer St.  
Joliet, IL 60432  
Tel. (800) 283-4244  
**Emergency Telephone** Call CHEMTREC 1-800-424-9300 (EKI CCN 7453)

## 2. HAZARDS IDENTIFICATION

### Classification

#### OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation	Category 1
Serious eye damage/eye irritation	Category 1
Carcinogenicity	Category 2

### Label elements

#### Signal word

Danger

#### Hazard statements

Causes severe skin burns and eye damage. Suspected of causing cancer.



#### Precautionary Statements - Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling.

#### Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated

clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

#### Precautionary Statements - Storage

Store locked up.

#### Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Trichloroacetic acid	76-03-9	100

### 4. FIRST AID MEASURES

#### Description of first aid measures

<b>Eye contact</b>	Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally. Remove contact lenses if present. Get immediate medical attention.
<b>Skin contact</b>	Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Immediate medical attention is required.
<b>Inhalation</b>	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
<b>Ingestion</b>	Do NOT induce vomiting. Rinse mouth. Drink 1 or 2 glasses of water. Immediate medical attention is required.

#### Most important symptoms and effects, both acute and delayed

**Symptoms** Causes severe skin burns and eye damage. May cause cancer.

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

#### Specific hazards arising from the chemical

Vapors form explosive mixtures with air: indoors, outdoors, and sewers explosion hazards.

#### Hazardous combustion products

Hydrogen chloride. Phosgene. Carbon oxides.

#### Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

**NFPA** Health hazards 3 Flammability 0 Instability 0 Physical and Chemical Properties -

### 6. ACCIDENTAL RELEASE MEASURES

#### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Ensure adequate ventilation, especially in confined areas.

**Environmental precautions** Prevent entry into waterways, sewers, basements or confined areas.

#### **Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Neutralize acid prior to using absorbent materials. Absorb spill with inert material, scoop up and containerize for disposal.

### **7. HANDLING AND STORAGE**

**Precautions for safe handling** Use personal protective equipment as required  
Handle in accordance with good industrial hygiene and safety practice.

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents.

### **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### **Occupational exposure limits**

<b>Chemical Name</b>	<b>ACGIH TLV</b>	<b>OSHA PEL</b>	<b>NIOSH IDLH</b>
Trichloroacetic acid 76-03-9	TWA: 0.5 ppm	(vacated) TWA: 1 ppm (vacated) TWA: 7 mg/m <sup>3</sup>	TWA: 1 ppm TWA: 7 mg/m <sup>3</sup>

#### **Appropriate engineering controls**

**Engineering Controls** Emergency showers, eyewash stations, ventilation systems.

#### **Individual protection measures, such as personal protective equipment**

**Eye/face protection** Tight sealing safety goggles.

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

### **9. PHYSICAL AND CHEMICAL PROPERTIES**

#### **Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear, colorless
<b>Odor</b>	No information available
<b>Odor threshold</b>	No information available
<b>pH</b>	1
<b>Melting point / freezing point</b>	No information available
<b>Boiling point / boiling range</b>	No information available
<b>Flash point</b>	No information available
<b>Evaporation rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	No information available

<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	No information available
<b>Water solubility</b>	No information available
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Kinematic viscosity</b>	No information available

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.
<b>Conditions to avoid</b>	Extremes of temperature and direct sunlight.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Carbon oxides. Phosgene. Hydrogen chloride.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation of respiratory tract.
<b>Eye contact</b>	Causes burns. Risk of serious damage to eyes.
<b>Skin contact</b>	Causes burns.
<b>Ingestion</b>	Harmful if swallowed. Causes burns.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Trichloroacetic acid 76-03-9	= 3310 mg/kg ( Rat )	-	-

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Skin corrosion/irritation</b>	Causes severe burns.
<b>Serious eye damage/eye irritation</b>	Risk of serious damage to eyes.
<b>Irritation</b>	Irritating to eyes, respiratory system and skin.
<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Trichloroacetic acid 76-03-9	A3	Group 2B	-	X

#### **Legend**

ACGIH (American Conference of Governmental Industrial Hygienists)  
A3 - Animal Carcinogen  
IARC (International Agency for Research on Cancer)  
Group 2B - Possibly Carcinogenic to Humans  
OSHA (Occupational Safety and Health Administration of the US Department of Labor)  
X - Present

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

No information available

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied.

**14. TRANSPORT INFORMATION**

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CFR §173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

**DOT**

<b>UN/ID no.</b>	2564
<b>Proper shipping name</b>	Trichloroacetic acid, solution
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

**IATA**

<b>UN/ID no.</b>	2564
<b>Proper shipping name</b>	Trichloroacetic acid, solution
<b>Hazard Class</b>	8
<b>Packing Group</b>	III

**15. REGULATORY INFORMATION**

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**SARA 311/312 Hazard Categories**

<b>Acute health hazard</b>	Yes
<b>Chronic Health Hazard</b>	Yes
<b>Fire hazard</b>	No

Sudden release of pressure hazard No  
 Reactive Hazard No

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

**U.S. State Right-to-Know Regulations**

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Trichloroacetic acid 76-03-9	X	X	X

**16. OTHER INFORMATION**

Prepared By EKI Regulatory Affairs (Email: reg@eki-chem.com)  
 Revision Date 03-Aug-2015

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**End of Safety Data Sheet**